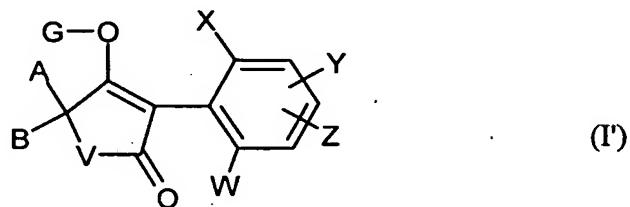


Claims

1. Oil-based suspension concentrates composed of

- at least one room-temperature-solid compound of the formula (I)



5 in which

V is oxygen or N-D,

X is halogen, alkyl, alkoxy, haloalkyl, haloalkoxy or cyano,

W, Y and Z independently of one another are hydrogen, halogen, alkyl, alkoxy, haloalkyl, haloalkoxy or cyano,

10 A is hydrogen, in each case optionally halogen-substituted alkyl, alkoxyalkyl, saturated, optionally substituted cycloalkyl, in which optionally at least one ring atom is replaced by a heteroatom,

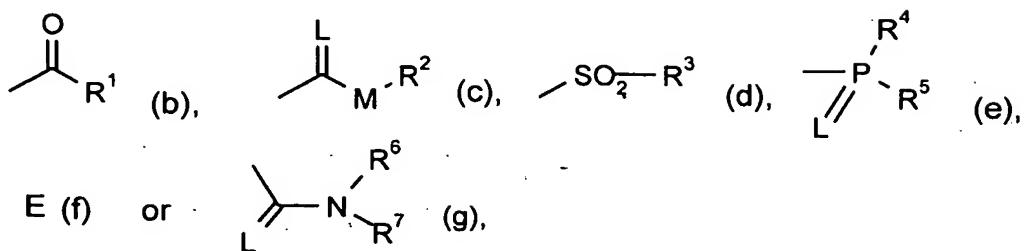
B is hydrogen or alkyl,

15 A and B together with the carbon atom to which they are attached are a saturated or unsaturated, unsubstituted or substituted ring optionally including at least one heteroatom,

D is hydrogen or an optionally substituted radical from the series alkyl, alkenyl, alkoxyalkyl, saturated cycloalkyl, in which optionally one or more ring members are replaced by heteroatoms,

20 A and D together with the atoms to which they are attached are a saturated or unsaturated ring which optionally includes at least one heteroatom and is unsubstituted or substituted in the A,D moiety,

G is hydrogen (a) or is one of the groups



in which

E is a metal ion or an ammonium ion,

5 L is oxygen or sulphur,

M is oxygen or sulphur,

10 R<sup>1</sup> is in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, polyalkoxyalkyl or optionally halogen-, alkyl- or alkoxy-substituted cycloalkyl which may be interrupted by at least one heteroatom, or in each case optionally substituted phenyl, phenylalkyl, hetaryl, phenoxyalkyl or hetaryloxyalkyl,

15 R<sup>2</sup> is in each case optionally halogen-substituted alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl or is in each case optionally substituted cycloalkyl, phenyl or benzyl,

R<sup>3</sup> is optionally halogen-substituted alkyl or optionally substituted phenyl,

20 R<sup>4</sup> and R<sup>5</sup> independently of one another are in each case optionally halogen-substituted alkyl, alkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio, cycloalkylthio or are in each case optionally substituted phenyl, benzyl, phenoxy or phenylthio, and

R<sup>6</sup> and R<sup>7</sup> independently of one another are hydrogen, in each case

5

optionally halogen-substituted alkyl, cycloalkyl, alkenyl, alkoxy, alkoxyalkyl, are optionally substituted phenyl, are optionally substituted benzyl or together with the nitrogen atom to which they are attached are an optionally oxygen- or sulphur-interrupted optionally substituted ring, and

10

- at least one penetrant,
- at least one vegetable oil,
- at least one nonionic surfactant and/or at least one anionic surfactant, and
- optionally one or more additives from the groups of the emulsifiers, foam inhibitors, preservatives, antioxidants, colorants and/or inert filler materials.

2. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

15

V is oxygen or N-D,

W is hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, chlorine, bromine or fluorine,

X is C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, fluorine, chlorine or bromine,

20

Y and Z are independently of one another hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl, halogen, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkyl,

A is hydrogen or in each case optionally halogen-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl,

B is hydrogen, methyl or ethyl,

25

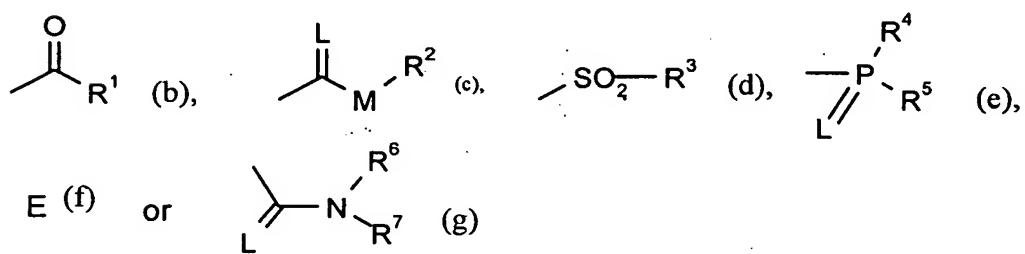
A, B and the carbon atom to which they are attached are saturated C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, in which optionally a ring member is replaced by oxygen or sulphur, and which is optionally mono- or disubstituted by C<sub>1</sub>-C<sub>4</sub>-

alkyl, trifluoromethyl or C<sub>1</sub>-C<sub>4</sub>-alkoxy,

D is hydrogen, in each case optionally fluorine- or chlorine-substituted C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>4</sub>-alkenyl or C<sub>3</sub>-C<sub>6</sub>-cycloalkyl,

5 A and D are together in each case optionally methyl-substituted C<sub>3</sub>-C<sub>4</sub>-alkanediyl, in which optionally a methylene group is replaced by sulphur,

G is hydrogen (a) or is one of the groups



in which

10 E is a metal ion or an ammonium ion,

L is oxygen or sulphur and

M is oxygen or sulphur,

15 R<sup>1</sup> is in each case optionally halogen-substituted C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy-C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio-C<sub>1</sub>-C<sub>4</sub>-alkyl or optionally fluorine-, chlorine-, C<sub>1</sub>-C<sub>4</sub>-alkyl- or C<sub>1</sub>-C<sub>2</sub>-alkoxy-substituted C<sub>3</sub>-C<sub>6</sub>-cycloalkyl,

is optionally fluorine-, chlorine-, bromine-, cyano-, nitro-, C<sub>1</sub>-C<sub>4</sub>-alkyl-, C<sub>1</sub>-C<sub>4</sub>-alkoxy-, trifluoromethyl- or trifluoromethoxy-substituted phenyl,

20 is in each case optionally chlorine- or methyl-substituted pyridyl or thienyl,

13.  $R^2$  is in each case optionally fluorine- or chlorine-substituted  $C_1$ - $C_{10}$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_1$ - $C_4$ -alkoxy- $C_2$ - $C_4$ -alkyl,  
is optionally methyl- or methoxy-substituted  $C_5$ - $C_6$ -cycloalkyl or  
is in each case optionally fluorine-, chlorine-, bromine-, cyano-, nitro-,  
15  $C_1$ - $C_4$ -alkyl-,  $C_1$ - $C_4$ -alkoxy-, trifluoromethyl- or trifluoromethoxy-  
substituted phenyl or benzyl,  
 $R^3$  is optionally fluorine-substituted  $C_1$ - $C_4$ -alkyl or is optionally fluorine-,  
chlorine-, bromine-,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, trifluoromethyl-,  
trifluoromethoxy-, cyano- or nitro-substituted phenyl,  
10  $R^4$  is in each case optionally fluorine- or chlorine-substituted  $C_1$ - $C_4$ -alkyl,  
 $C_1$ - $C_4$ -alkoxy,  $C_1$ - $C_4$ -alkylamino,  $C_1$ - $C_4$ -alkylthio or is in each case  
optionally fluorine-, chlorine-, bromine-, nitro-, cyano-,  $C_1$ - $C_4$ -  
alkoxy-, trifluoromethoxy-,  $C_1$ - $C_4$ -alkylthio-,  $C_1$ - $C_4$ -haloalkylthio-,  
15  $C_1$ - $C_4$ -alkyl- or trifluoromethyl-substituted phenyl, phenoxy or  
phenylthio,  
 $R^5$  is  $C_1$ - $C_4$ -alkoxy or  $C_1$ - $C_4$ -thioalkyl,  
 $R^6$  is  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -cycloalkyl,  $C_1$ - $C_6$ -alkoxy,  $C_3$ - $C_6$ -alkenyl,  $C_1$ - $C_4$ -  
alkoxy- $C_1$ - $C_4$ -alkyl,  
20  $R^7$  is  $C_1$ - $C_6$ -alkyl,  $C_3$ - $C_6$ -alkenyl or  $C_1$ - $C_4$ -alkoxy- $C_1$ - $C_4$ -alkyl,  
 $R^6$  and  $R^7$  together are an optionally methyl- or ethyl-substituted  $C_3$ - $C_6$ -  
alkylene radical, in which optionally a carbon atom is replaced by  
oxygen or sulphur.  
3. Suspension concentrates according to Claim 1, comprising compounds of the  
formula (I'), in which  
25  $V$  is oxygen or N-D,  
 $W$  is hydrogen, methyl, ethyl, chlorine, bromine or methoxy,

X is chlorine, bromine, methyl, ethyl, propyl, isopropyl, methoxy, ethoxy or trifluoromethyl,

Y and Z are independently of one another hydrogen, fluorine, chlorine, bromine, methyl, ethyl, propyl, isopropyl, trifluoromethyl or methoxy,

5 A is methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, cyclopropyl, cyclopentyl or cyclohexyl,

B is hydrogen, methyl or ethyl,

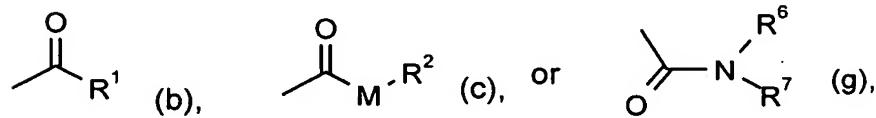
A, B and the carbon atom to which they are attached are saturated C<sub>6</sub>-cycloalkyl, in which optionally a ring member is replaced by

10 oxygen, and which is optionally monosubstituted by methyl, ethyl, trifluoromethyl, methoxy, ethoxy, propoxy or butoxy,

D is hydrogen, is methyl, ethyl, propyl, isopropyl, butyl, isobutyl, allyl, cyclopropyl, cyclopentyl or cyclohexyl,

A and D are together optionally methyl-substituted C<sub>3</sub>-C<sub>4</sub>-alkanediyl,

15 G is hydrogen (a) or is one of the groups



in which

M is oxygen or sulphur,

20 R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, methoxymethyl, ethoxymethyl, ethylthiomethyl, cyclopropyl, cyclopentyl or cyclohexyl,

is optionally fluorine-, chlorine-, bromine-, cyano-, nitro-, methyl-, ethyl-, methoxy-, trifluoromethyl- or trifluoromethoxy-substituted phenyl,

is in each case optionally chlorine- or methyl-substituted pyridyl or thienyl,

$R^2$  is  $C_1$ - $C_8$ -alkyl,  $C_2$ - $C_4$ -alkenyl, methoxyethyl, ethoxyethyl or is phenyl or benzyl,

5  $R^6$  and  $R^7$  are independently of one another methyl, ethyl or together are a  $C_5$ -alkylene radical in which the  $C_3$ -methylene group is replaced by oxygen.

4. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

10  $V$  is  $N$ -D,

$W$  is hydrogen or methyl,

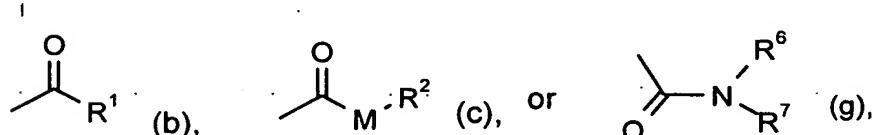
$X$  is chlorine, bromine or methyl,

$Y$  and  $Z$  are independently of one another hydrogen, chlorine, bromine or methyl,

15  $A$ ,  $B$  and the carbon atom to which they are attached are saturated  $C_6$ -cycloalkyl, in which optionally a ring member is replaced by oxygen, and which is optionally monosubstituted by methyl, trifluoromethyl, methoxy, ethoxy, propoxy or butoxy,

$D$  is hydrogen,

20  $G$  is hydrogen (a) or is one of the groups



in which

$M$  is oxygen or sulphur,

R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, methoxymethyl, ethoxymethyl, ethylmethylthio, cyclopropyl, cyclopentyl, cyclohexyl or

is optionally fluorine-, chlorine-, bromine-, methyl-, methoxy-, trifluoromethyl-, trifluoromethoxy-, cyano- or nitro-substituted phenyl,

5

is in each case optionally chlorine- or methyl-substituted pyridyl or thienyl,

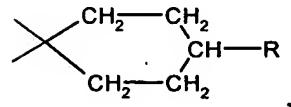
R<sup>2</sup> is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>4</sub>-alkenyl, methoxyethyl, ethoxyethyl, phenyl or benzyl,

10 R<sup>6</sup> and R<sup>7</sup> are independently of one another methyl, ethyl or together are a C<sub>5</sub>-alkylene radical, in which the C<sub>3</sub>-methylene group is replaced by oxygen.

5. Suspension concentrates according to Claim 1, comprising compounds of the formula (I') in which

15 V is N-H, and

A and B together with the carbon atom to which they are attached are a substituted six-membered ring



20 and the substituents W, X, Y, Z, G and R have the definitions indicated in the table

| W | X               | Y                 | Z | R                | G  |
|---|-----------------|-------------------|---|------------------|--|
| H | Br              | 5-CH <sub>3</sub> | H | OCH <sub>3</sub> | CO-i-C <sub>3</sub> H <sub>7</sub>             |
| H | Br              | 5-CH <sub>3</sub> | H | OCH <sub>3</sub> | CO <sub>2</sub> -C <sub>2</sub> H <sub>5</sub> |
| H | CH <sub>3</sub> | 5-CH <sub>3</sub> | H | OCH <sub>3</sub> | H  |
| H | CH <sub>3</sub> | 5-CH <sub>3</sub> | H | OCH <sub>3</sub> | CO <sub>2</sub> -C <sub>2</sub> H <sub>5</sub> |

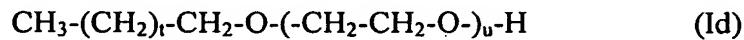
|                 |                 |                   |                   |                                |   |
|-----------------|-----------------|-------------------|-------------------|--------------------------------|---|
| CH <sub>3</sub> | CH <sub>3</sub> | 3-Br              | H                 | OCH <sub>3</sub>               | H   |
| CH <sub>3</sub> | CH <sub>3</sub> | 3-Cl              | H                 | OCH <sub>3</sub>               | H   |
| H               | Br              | 4-CH <sub>3</sub> | 5-CH <sub>3</sub> | OCH <sub>3</sub>               | CO-i-C <sub>3</sub> H <sub>7</sub>            |
| H               | CH <sub>3</sub> | 4-Cl              | 5-CH <sub>3</sub> | OCH <sub>3</sub>               | CO <sub>2</sub> C <sub>2</sub> H <sub>5</sub> |
| CH <sub>3</sub> | CH <sub>3</sub> | 3-CH <sub>3</sub> | 4-CH <sub>3</sub> | OCH <sub>3</sub>               | H   |
| CH <sub>3</sub> | CH <sub>3</sub> | 3-Br              | H                 | OC <sub>2</sub> H <sub>5</sub> | CO-i-C <sub>3</sub> H <sub>7</sub>            |
| H               | CH <sub>3</sub> | 4-CH <sub>3</sub> | 5-CH <sub>3</sub> | OC <sub>2</sub> H <sub>5</sub> | CO-n-C <sub>3</sub> H <sub>7</sub>            |
| H               | CH <sub>3</sub> | 4-CH <sub>3</sub> | 5-CH <sub>3</sub> | OC <sub>2</sub> H <sub>5</sub> | CO-i-C <sub>3</sub> H <sub>7</sub>            |
| H               | CH <sub>3</sub> | 4-CH <sub>3</sub> | 5-CH <sub>3</sub> | OC <sub>2</sub> H <sub>5</sub> | CO-c-C <sub>3</sub> H <sub>5</sub>            |

6. Process for producing suspension concentrates according to Claim 1, characterized in that

- at least one room-temperature-solid compound of the formula (I'),
- 5 - at least one penetrant,
- at least one vegetable oil,
- at least one nonionic surfactant and/or at least one anionic surfactant, and
- optionally one or more additives from the groups of the emulsifiers, foam inhibitors, preservatives, antioxidants, colorants and/or inert filler materials

10 are mixed with one another and the resultant suspension is optionally subsequently ground.

15 7. Suspension concentrates according to Claim 1, characterized by the presence as penetrant of at least one alkanol alkoxylate of the formula



in which

t stands for numbers from 9 to 10.5

and

u stands for numbers from 7 to 9.

8. Suspension concentrates according to Claim 7, characterized by the presence  
5 as penetrant of at least one alkanol alkoxylate of the formula (Id) in which

t stands for the average value 10.5 and

u stands for the average value 8.4.

9. Suspension concentrates according to Claim 1, characterized in that the  
amount

10 - of compound of the formula (I') is between 5% and 30% by weight,

- of penetrants is between 5% and 30% by weight,

- of vegetable oil is between 20% and 55% by weight,

- of surfactants is between 2.5% and 30% by weight,

- of additives is between 0% and 25% by weight.

15 10. Use of suspension concentrates according to Claim 1 for applying the  
compounds of the formula (I') comprised to plants and/or their habitat.

11. Use of suspension concentrates according to Claim 1 for controlling insects.

12. Compositions characterized by the presence therein of a suspension  
concentrate according to Claim 1 and extenders and/or surface-active  
20 reagents.